Amendments to the Claims:

A clean version of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An integrated circuit comprising a set of cells, each cell comprising an electrical device having a device parameter with a parameter value which is a function of random parametric variations, the set of cells comprising:

a first subset of identification cells; and

a second subset of cells for generating an identification code by measuring the parameter values of the identification cells ~~characterized in that~~wherein the identification cells have first random parametric variations and the cells of the second subset have second random parametric variations, the first random parametric variations being larger than the second random parametric variations.

2. (Currently Amended) An integrated circuit as claimed in claim 1, ~~characterized in that~~wherein:

the first random parametric variations cause random differences among the parameter values of the identification cells, the random differences each having an absolute value, the absolute values having an average value; and

the second random parametric variations cause an offset in the parameter values of the identification cells, the offset having an absolute value, the average value being larger than the absolute value of the offset.

3. (Currently Amended) An integrated circuit as claimed in claim 2, ~~characterized in that~~wherein the identification cells each contain only one electrical device.

4. (Currently Amended) An integrated circuit as claimed in claim 1, ~~characterized in that~~wherein the random parametric variations comprise a random distribution of doping atoms in at least a part of the electrical device.

5. (Currently Amended) An integrated circuit as claimed in claim 4, ~~characterized in that~~wherein the electrical device comprises a metal oxide semiconductor field effect transistor comprising a source, a drain, a gate, and a channel, which is situated between the source, the drain and the gate, the channel being electrically insulated from the gate by an oxide, the part of the electrical device shaving the random distribution of doping atoms comprising the channel.

6. (Currently Amended) An integrated circuit as claimed in claim 1, ~~characterized in that~~wherein the electrical device comprises an ohmic resistor having a resistance value, which is a function of the random parametric variations.

7. (Currently Amended) An integrated circuit as claimed in claim 6, ~~characterized in that~~wherein the ohmic resistor comprises a silicide material and has a shape, the random parametric variations comprising a random distribution of shapes.

8. (Currently Amended) An integrated circuit as claimed in claim 6, ~~characterized in that~~wherein the random parametric variations comprise a random distribution of insulating objects in the ohmic resistor.

9. (Currently Amended) An integrated circuit as claimed in claim 8, ~~characterized in that~~wherein the first subset comprises a random number of identification cells each having ohmic resistors comprising a first part and a second part, which is electrically insulated from the first part by the insulating objects.

10. (Currently Amended) A method for manufacturing an integrated circuit as claimed in claim 1, the integrated circuit comprising a substrate and a set of cells, each cell comprising an electrical device having a device parameter with a parameter value which is a function of random parametric variations, the substrate comprising a first portion and a second portion, the method comprising a step which causes the cells to have the random parametric variations, ~~characterized in that~~wherein means for increasing the random parametric variations, in at least a part of the first portion with respect to the random parametric variations in the second portion are applied during at least part of the execution of said step.

11. (Currently Amended) A method as claimed in claim 10, ~~characterized in that~~wherein during at least a part of the step of applying the means for increasing the random parametric variations the second portion is covered by a first mask which at least partly prevents an increase of the random parametric variations in the second portion.

12. (Currently Amended) A method as claimed in claim 11, ~~characterized in that~~wherein the step causing random parametric variations comprises a sub-step causing random parametric variations in at least a part of the second portion while the first portion is covered by a second mask which at least partly prevents introducing the random parametric variations in the first portion during the sub-step.

13. (Currently Amended) A method as claimed in claim 10, ~~characterized in that~~wherein the step causing the random parametric variations comprises implanting doping atoms.

14. (Currently Amended) A method as claimed in claim 13, ~~characterized in that~~wherein the means for increasing the random parametric variations comprise objects randomly distributed over at least a part of the first portion, the objects at least partly preventing doping atoms from being implanted.

15. (Currently Amended) A method as claimed in claim 13, ~~characterized in that~~wherein at least a part of the doping atoms carry a charge when they are implanted and a deflection unit randomly deflecting the charged doping atoms by applying a random deflection signal is used as the means for increasing the random parametric variations.